

## REMARKS

In the Office Action mailed on November 28, 2005 by the United States Patent and Trademark Office, the Examiner rejected claims 1-45. By way of this response and amendment, Applicant has amended claims 1-7, 14, 15, 18, 19, 23, 27, 31, and 33. Accordingly, claims 1-45 are currently pending in this patent application. Applicants respectfully request reconsideration in light of the foregoing amendments and the following remarks.

### I. INTRODUCTION

Prior to the present invention, wireless data communications networks that followed a wireless communication standard protocol (e.g., IEEE Standard 802.11) provided mobile unit access with a central computer through access points. These access points were configured to perform almost all, if not all, of the implemented requirements of the standard protocol, and thus access point configuration presented numerous disadvantages.

For example, and without any intention of limiting the applicable disadvantages, each of the prior art access points had to determine which of the data communications received over a wired network was destined for a mobile unit associated with a particular access point. This required each of the access points to have significant computational capacity, which increased the cost of the devices. In addition, the overall system cost was increased as additional access points were generally needed to support high volume data communications from multiple users. Moreover, prior art systems having a large number of access points, each with a memory containing program instructions for carrying out the various functions, provided additional difficulty when upgrading a system or providing a change in system configuration, as any upgrade or change would generally require changes to the program code in each of the access points. As such, a change or upgrade required a significant amount of time and effort, and accordingly an increase in the expense.

In contrast to these prior art systems, the configuration and operation of the communication network of the present invention are designed to overcome the disadvantages previously described and also disadvantages not expressly or implicitly presented in this response or the above-identified patent application. The design includes, but is not limited to, separately housing a device (e.g., a cell controller) from the RF ports, and configuring the cell

controller to perform the higher level medium access control (MAC) functions for the RF ports such that the RF ports are performing the lower level MAC functions. This redesign provides, among other things, a concentration of operational control in one or more devices (e.g., one or more cell controllers) other than the RF ports, which eases system management, including installation of modifications and upgrades, and reduces the computational requirements and cost of the individual RF ports.

## II. CLAIM REJECTIONS

The Examiner rejected claims 1, 15, 18, 19, 23, 27, 31 and 33 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,665,536 as issued to Mahany on December 16, 2003 (hereinafter referred to as “Mahany”). Furthermore, the Examiner rejected claims 1-6, 15, 17-20, 22-24, 26, 27, and 31-45 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,259,898 as issued to Lewis on July 10, 2001 (hereinafter referred to as “Lewis”) in view of Mahany. In addition, the Examiner rejected claims 7-14 under 35 U.S.C. §103(a) as being unpatentable over Lewis in view of Mahany as applied above, and further in view of U.S. Patent No. 6,629,151 as issued to Bahl on September 30, 2003 (hereinafter referred to as “Bahl”). Moreover, the Examiner rejected claims 16, 21, and 25 under 35 U.S.C. §103(a) as being unpatentable over Lewis in view of Mahany, and further in view of U.S. Patent No. 6,031,863 as issued to Jusa et al. on February 29, 2000 (hereinafter referred to as “Jusa”). Lastly, the Examiner rejected claims 28-30 under 35 U.S.C. §103(a) as being unpatentable over Lewis in view of Mahany, and further in view of U.S. Patent No. 6,205,495 as issued to Gilbert et al. on March 20, 2001 (hereinafter referred to as “Gilbert”). Applicants respectfully traverse these rejections.

In order to expedite prosecution of the above-identified patent application, Applicant has amended the claims. The claim amendments address informalities discussed by the undersigned and Examiner Chirag during an Examiner Interview held on April 20, 2006, and these amendments are not being made for reasons of patentability. In addition, Applicant has amended the claims to further clarify Applicant’s invention.

More specifically, Applicant has amended independent claim 1 to recite “separately housing a common cell controller from the plurality of RF ports” and providing the wireless

medium access “in accordance with a wireless communication standard protocol having higher and lower medium access control (MAC) functions.” Similarly, independent claim 15 has been amended to recite that the logical entity is “housed separately from said RF port” and claims 18 and 19 have been amended to recited that the RF port is “separately housed from a wired network” and claims 15, 18, and 19 have been amended to recite that the high level and low level MAC functions are functions of a “wireless communications standard protocol.” Moreover, claims 23, 27, 31, and 33 have also been amended to recite that the MAC functions are functions of a “wireless communications standard protocol,” claim 27 has been amended to recite that the RF port is “separately housed from said communications system,” claim 31 has been amended to recite “separately housing said cell controller from an RF port,” claim 31 has been amended to recite that the “cell controller performs the high level MAC functions,” and claim 33 has been amended to recite that at least one cell controller is “separately housed from said at least one RF port.”

It is respectfully submitted that each of the references of record, individually or in any combination, do not teach, disclose or suggest the Applicant’s invention as defined by the amended claims. Accordingly, it is respectfully submitted that independent claims 1, 15, 18, 19, 23, 27, 31, and 33 are not anticipated nor rendered obvious in view of the references of record. Therefore, it is respectfully submitted that claims 2-14, 16-17, 20-22, 24-26, 28-30, and 32 are not anticipated nor rendered obvious by the references of record based at least upon their dependency on one of the independent claims.

### III. CONCLUSION


In view of the foregoing, Applicant respectfully submits that the above-identified application as amended is in condition for allowance and the Applicant therefore earnestly requests such allowance. Should the Examiner have any questions or wish to discuss the foregoing response and amendment, Applicants request that the Examiner contact the undersigned at (480) 385-5060.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment of this application, please consider this as a request for an extension for the required time period

and/or authorization to charge Ingrassia Fisher & Lorenz, PC Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

Dated 05/11/06



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